**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A method of selecting a hop channel for use in a channel hopping communication system that communicates over a physical channel and includes a sequence of hop channels[,] ~~wherein the sequence comprises~~ comprising a set of forbidden hop channels and a remaining set of allowable hop channels, the method comprising the steps of:

selecting a hop channel from the sequence as a function of a present phase;

if the selected hop channel ~~is an~~ belongs to said set of allowable hop channels ~~channel~~, then using the selected hop channel for communication during the present phase; and

if the selected hop channel ~~is a~~ belongs to said set of forbidden hop channels ~~channel~~, then:

using a time-varying parameter to select, at the present phase, a substitute hop channel from the set of allowable hop channels, wherein the time-varying parameter is independent of conditions on the physical channel and a determination as to the selection of a hop channel as the substitute hop channel from the set of allowable hop channels is made each time the selected hop channel belongs to the set of forbidden hop channels; and

using the substitute hop channel for communication during the present phase.

2. (Original) The method of claim 1, wherein the time-varying parameter is a clock value.

3. (Original) The method of claim 1, wherein the time-varying parameter and the present phase are derived from a same clock value.

4. (Original) The method of claim 1, wherein the time-varying parameter is a randomly selected value.

5. (Original) The method of claim 1, wherein the time-varying parameter is a pseudo-randomly selected value.

6. (Original) The method of claim 1, wherein at least one of the forbidden hop channels is associated with received interference from a jammer.

7. (Original) The method of claim 1, wherein at least one of the forbidden hop channels is reserved for use by a communication system that is not the channel hopping communication system.

8. (Original) The method of claim 1, further comprising the step of dynamically determining the set of forbidden hop channels, whereby the set of forbidden hop channels varies over time.

9. (Canceled)

10. (Currently Amended) The method of claim 31, wherein the step of determining the index value as a function of the time-varying parameter comprises determining the expression:

*index value* = *mod* (*time-varying parameter*, N2) + BASE VALUE, where mod (*j*,*k*) denotes *j* modulo *k*, N2 is the number of allowable hop channels in the sequence of allowable ~~chop~~ hop channels and BASE VALUE represents an index value of the first allowable hop channel in the sequence of allowable hop channels.

11. (Canceled)

12. (Previously Presented) The method of claim 32, wherein the first hop channel is the first hop channel in the sequence of hop channels.

13. (Previously Presented) The method of claim 32, wherein:

the first hop channel is a first hop channel after a last forbidden hop channel in the sequence of hop channels; and

the step of processing the sequence of hop channels to determine an *i*th allowable hop channel in the sequence of hop channels wraps around to the start of the sequence of hop channels when i is greater than the number of hop channels following the last forbidden hop channel in the sequence of hop channels.

14. (Previously Presented) The method of claim 32, wherein the step of processing the sequence of hop channels to determine an *i*th allowable hop channel in the sequence of hop channels comprises the steps of:

starting at the first hop channel and continuing with each successive hop channel in the sequence of hop channels, determining whether the hop channel is an allowable hop channel; and

stopping when an *i*th allowable hop channel has been identified in the sequence of hop channels.

15. (Previously Presented) The method of claim 32, further comprising the step of:

for each of the hop channels in the sequence of hop channels, determining a gap count that represents how many forbidden hop channels are in the sequence of hop channels from the first hop channel up to and including said each of the hop channels;

and wherein the step of processing the sequence of hop channels to determine an *i*th allowable hop channel in the sequence of hop channels comprises the steps of:

(a) using the index value plus a previous gap count to select one of the hop channels from the sequence of hop channels; and

(b) if the selected hop channel is associated with a present gap count that is equal to the previous gap count, then using the selected hop channel as the substitute hop channel, otherwise setting the previous gap count equal to the present gap count and repeating steps (a) and (b).

16. (Currently Amended) A hop channel selector for use in a channel hopping communication system that communicates over a physical channel and includes a sequence of hop channels[,] ~~wherein the sequence comprises~~ comprising a set of forbidden hop channels and a remaining set of allowable hop channels, the hop channel selector comprising:

logic configured to select a hop channel from the sequence as a function of a present phase;

logic configured to use the selected hop channel for communication during the present phase if the selected hop channel ~~is an~~ belongs to said set of allowable hop channels ~~channel~~; and

logic configured to use a time-varying parameter to select, at the present phase, a substitute hop channel from the set of allowable hop channels and to use the substitute hop channel for communication during the present phase if the selected hop channel ~~is not an~~ does not belong to said set of allowable hop channels ~~channel~~, wherein the time-varying parameter is independent of conditions on the physical channel and a determination as to the selection of a hop channel as the substitute hop channel from the set of allowable hop channels is made each time the selected hop channel belongs to the set of forbidden hop channels.

17. (Original) The hop channel selector of claim 16, wherein the time varying parameter is a clock value.

18. (Original) The hop channel selector of claim 16, wherein the time- varying parameter and the present phase are derived from a same clock value.

19. (Original) The hop channel selector of claim 16, wherein the time- varying parameter is a randomly selected value.

20. (Original) The hop channel selector of claim 16, wherein the time- varying parameter is a pseudo-randomly selected value.

21. (Original) The hop channel selector of claim 16, wherein at least one of the forbidden hop channels is associated with received interference from a jammer.

22. (Original) The hop channel selector of claim 16, wherein at least one of the forbidden hop channels is reserved for use by a communication system that is not the channel hopping communication system.

23. (Original) The hop channel selector of claim 16, further comprising logic configured to dynamically determine the set of forbidden hop channels, whereby the set of forbidden hop channels varies over time.

24. (Canceled)

25. (Currently Amended) The hop channel selector of claim 33, wherein the logic configured to determine an index value as a function of the time- varying parameter comprises logic configured to determine the expression:

*index value* = mod (*time-varying parameter*, N2) + BASE VALUE, where mod (*j*,*k*) denotes *j* modulo *k*, N2 is the number of allowable hop channels in the sequence of allowable ~~chop~~ hop channels and BASE VALUE represents an index value of the first allowable hop channel in the sequence of allowable hop channels.

26. (Canceled)

27. (Previously Presented) The hop channel selector of claim 34, wherein the first hop channel is the first hop channel in the sequence of hop channels.

28. (Previously Presented) The hop channel selector of claim 34, wherein:

the first hop channel is a first hop channel after a last forbidden hop channel in the sequence of hop channels; and

the logic configured to process the sequence of hop channels to determine an *i*th allowable hop channel in the sequence of hop channels is configured to wrap around to the start of the sequence of hop channels when i is greater than the number of hop channels following the last forbidden hop channel in the sequence of hop channels.

29. (Previously Presented) The hop channel selector of claim 34, wherein the logic configured to process the sequence of hop channels to determine an *i*th allowable hop channel in the sequence of hop channels comprises:

logic configured to:

determine, starting at the first hop channel and continuing with each successive hop channel in the sequence of hop channels, whether the hop channel is an allowable hop channel; and

stop when an *i*th allowable hop channel has been identified in the sequence of hop channels.

30. (Previously Presented) The hop channel selector of claim 34, further comprising: logic configured to determine a gap count for each of the hop channels in the sequence of hop channels, wherein the gap count represents how many forbidden hop channels are in the sequence of hop channels from the first hop channel up to and including said each of the hop channels; and wherein the logic configured to process the sequence of hop channels to determine an ith allowable hop channel in the sequence of hop channels comprises logic configured:

(a) to use the index value plus a previous gap count to select one of the hop channels from the sequence of hop channels; and

(b) to use the selected hop channel as the substitute hop channel if the selected hop channel is associated with a present gap count that is equal to the previous gap count, otherwise to set the previous gap count equal to the present gap count and repeating operations (a) and (b).

31. (Previously Presented) The method of claim 1, further comprising the step of forming a sequence of allowable hop channels from the set of allowable hop channels, and wherein the step of using a time-varying parameter to select a substitute hop channel from the set of allowable hop channels comprises the steps of:

forming an index value from the time-varying parameter;

using the index value to select one of the allowable hop channels from the sequence of allowable hop channels; and

using the selected allowable hop channel as the substitute hop channel.

32. (Previously Presented) The method of claim 1, wherein the step of using a time-varying parameter to select a substitute hop channel from the set of allowable hop channels comprises the steps of:

determining an index value, *i*, as a function of the time-varying parameter;

designating one of the allowable hop channels in the sequence of hop channels as a first hop channel;

starting at the first hop channel, processing the sequence of hop channels to determine an *i*th allowable hop channel in the sequence of hop channels; and

selecting the *i*th allowable hop channel for use as the substitute hop channel.

33. (Previously Presented) The hop channel selector of claim 16, further comprising logic configured to form a sequence of allowable hop channels from the set of allowable hop channels, and wherein the logic configured to use a time-varying parameter to select a substitute hop channel from the set of allowable hop channels comprises:

logic configured to form an index value from the time-varying parameter;

logic configured to use the index value to select one of the allowable hop channels from the sequence of allowable hop channels; and

logic configured to use the selected allowable hop channel as the substitute hop channel.

34. (Previously Presented) The hop channel selector of claim 16, wherein the logic configured to use a time-varying parameter to select a substitute hop channel from the set of allowable hop channels comprises:

logic configured to determine an index value, *i*, as a function of the time-varying parameter;

logic configured to designate one of the allowable hop channels in the sequence of hop channels as a first hop channel;

logic configured to process the sequence of hop channels, starting at the first hop channel, to determine an *i*th allowable hop channel in the sequence of hop channels; and

logic configured to select the *i*th allowable hop channel for use as the substitute hop channel.

35. (Previously Presented) The method of claim 1, wherein the substitute hop channel need not be the same as the previously selected substitute channel for the forbidden hop channel.

36. (Previously Presented) The method of claim 1, wherein the time-varying parameter is based on a system clock.

37. (Previously Presented) The hop channel selector of claim 16, wherein the substitute hop channel need not be the same as the previously selected substitute channel for the forbidden hop channel.

38. (Previously Presented) The hop channel selector of claim 16, wherein the time varying parameter is based on a system clock.

39. (New) The hop channel selector of claim 16, wherein the substitute hop channel is selected on a dynamic basis.

40. (New) The hop channel selector of claim 16, wherein each of the allowable hop channels is available for selection as the hop channel.

41. (New) The hop channel selector of claim 16, wherein each of the allowable hop channels is available for selection as the substitute hop channel.

42. (New) The hop channel selector of claim 40, wherein each of the allowable hop channels is also available for selection as the substitute hop channel.

43. (New) The method of claim 1, wherein the substitute hop channel is selected in a dynamic manner.

44. (New) The method of claim 1, wherein each of the allowable hop channels is available for selection as the hop channel.

45. (New) The hop channel selector of claim 1, wherein each of the allowable hop channels is available for selection as the substitute hop channel.

46. (New) The hop channel selector of claim 44, wherein each of the allowable hop channels is also available for selection as the substitute hop channel.